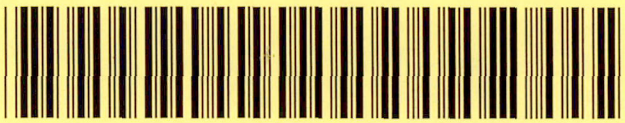
1246IHSSF2232



DocumentID NONCD0002834

Site Name BURLINGTON INDUSTRIES

DocumentType Correspondence (C)

RptSegment 1

DocDate 3/12/1992

DocRcvd 2/20/2007

Box SF2232

AccessLevel PUBLIC

Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

March 12, 1992

DEHNR
Fayetteville Regional Office
Division of Environmental Mgmt.
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: Stephen Barnhardt

Subject: Land Application of Contaminated Soil
Burlington Industries
Raeford Plant
Hoke County

Dear Mr. Barnhardt:

As discussed in the 1/6/92 letter from Mr. Noland of the DEM, following are the details of the land application of the approximately 10 cubic yards of soil contaminated with oil and grease. As discussed previously, the soil was removed from several UST sites at the facility and tested for GC/MS purgeables (SW-846 method 8240), oil and grease, #2 fuel oil, kerosene, varsol and gasoline. Oil and grease at 810 mg/kg was the only contaminant found (see attached lab results).

METHOD OF APPLICATION

- The contaminated soil will be spread to a thickness of approximately 1 to 2 inches.

- The spread soils will be fertilized with 10-10-10 fertilizer at a rate of 25 lbs/100 yd^2, limed at a rate of 40 lbs/100 yd^2 and seeded with Kentucky 31 grass seed at a rate of 5 lbs/100 yd^2.

- The seeded soils will be covered with straw to prevent erosion and promote seed germination.

LOCATION

- The location of the land-application of the soils will be the area adjacent to the spray pond as shown on the attached drawing.

Please forward the Certificate of Approval so land-application of the soils can proceed.

If you have questions or comments, please contact me at 804-374-8111 extension 3514.

Sincerely,

G. Mike Garlick
Division Environmental Engineer

GMG/dr

Andrew Allen
875 3731

cc: T. Fripp - BMEO
B. Hennessey - BMEO
L. Nowell - Raeford. 336 Larry Nowell
T. LeJeune - 3330/Energy

GC/MS PURGEABLES
SW-846 METHOD 8240

IEA Sample Number: 794-179(0)-1
Sample Identification: SS-1 Soil
Date Analyzed: 07/23/91 By: Greene

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	100	BQL
2	Benzene	5	BQL
3	Bromodichloromethane	5	BQL
4	Bromoform	5	BQL
5	Bromomethane	10	BQL
6	2-Butanone	100	BQL
7	Carbon disulfide	5	BQL
8	Carbon tetrachloride	5	BQL
9	Chlorobenzene	5	BQL
10	Dibromochloromethane	5	BQL
11	Chloroethane	10	BQL
12	2-Chloroethylvinyl ether	10	BQL
13	Chloroform	5	BQL
14	Chloromethane	10	BQL
15	1,1-Dichloroethane	5	BQL
16	1,2-Dichloroethane	5	BQL
17	1,1-Dichloroethene	5	BQL
18	1,2-Dichloroethene (total)	5	BQL
19	1,2-Dichloropropane	5	BQL
20	cis-1,3-Dichloropropene	5	BQL
21	trans-1,3-Dichloropropene	5	BQL
22	Ethylbenzene	5	BQL
23	2-Hexanone	50	BQL
24	Methylene chloride	5	BQL
25	4-Methyl-2-pentanone	50	BQL
26	Styrene	5	BQL
27	1,1,2,2-Tetrachloroethane	5	BQL
28	Tetrachloroethene	5	BQL
29	Toluene	5	BQL
30	1,1,1-Trichloroethane	5	BQL
31	1,1,2-Trichloroethane	5	BQL
32	Trichloroethene	5	BQL
33	Vinyl acetate	50	BQL
34	Vinyl chloride	10	BQL
35	Xylenes (total)	5	BQL

Comments:
BQL = Below Quantitation Limit

IEA LABORATORY RESULTS

SOIL

IEA Project #: 794-179(0)
Client Name: Aquaterra, Inc.

Sample #	Client ID	Parameter	Results	Date Analyzed
1	SS-1	Oil & Grease (Gravimetric)	810 mg/kg	07/31/91

Total Petroleum Hydrocarbon Analysis

IEA Sample No:	794-179(1)-1	Date Sampled:	Ø7-12-91
Client Sample No:	SS-1 Soil	Date Received:	Ø7-19-91
Client Project No:	C467	Date Extracted:	Ø7-23-91

Extraction (SW 846 - 355Ø) / GC-FID analysis (for #2 fuel oil,kerosene,varsol)
Date Analyzed: Ø7-25-91 Analyzed by: Correa

The sample does not contain a petroleum hydrocarbon blend in the distillation range referenced above. The quantitation limit is 2.Ø mg/kg.

Comment:

==========

Purge and Trap (SW 846 - 5Ø3Ø) / GC-FID analysis (for gasoline only)
Date Analyzed: Ø7-24-91 Analyzed by: Correa

The sample does not contain a petroleum hydrocarbon blend with a distillation range similar to gasoline. The quantitation limit is 2.Ø mg/kg.

Comment:

VARSOL TANK
(REMOVED)

TEST WELL
(TYP)

PLANT

MAINT. SHED

BOILER

ABOVE GROUNG
WASTE OIL

PUMP HOUSE

OPEN RESERVOIR

STORAGE SHED

COAL STORAGE

#6 OIL TANK

FUEL OIL TANK

LAND APPLICATION
AREA

SPRAY POND

STORM DRAINAGE DITCH

STORM DRAINAGE DITCH

RECEIVED
MAR 16 1992
ENV. MANAGEMENT
FAYETTEVILLE REG. OFFICE

REV. NO.	DESCRIPTION	BY	DATE

Burlington Industries, Inc.
MENSWEAR DIVISION
DIVISION ENGINEERING - CLARKSVILLE, VIRGINIA

PROJECT

PLANT RAEFORD AND BMD
LOCATION RAEFORD NC

SITE PLAN

SCALE: 1"=60' DATE: 3/12/92 SHEET 1 OF 1 028
DRAWN: GT REID APPVD:

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

December 16, 1991

DEHNR
Fayetteville Regional Office
Division of Environmental Management
Wachovia Building, Suite 714
Fayetteville, North Carolina 28301-5043

ATTN: M.J. Noland, Regional Supervisor

RE: Groundwater Assessment
Burlington Industries - BMD Plant
Raeford, Hoke County - Incident No. 5531

Dear Mr. Noland:

Enclosed, please find the results from re-sampling monitor wells MW-5:, MW-6: and MW7 as discussed in my October 14, 1991 letter to the DEM.

Burlington will proceed with Phase II work to determine the vertical and horizontal extent of groundwater contamination as follows:

- Install three additional shallow ground water wells (30-40 feet deep) to assess the horizontal extent of the contamination.

- Install one deep ground water monitoring well (~75 feet deep) to assess the vertical extent of the contamination.

The deep monitoring well will be used to assess the vertical extent of ground water contamination near the retention pond while the shallow monitoring wells will be used to assess the extent of the down-gradient and lateral contamination. All newly installed wells will be sampled and analyzed for purgeable halocarbon compounds according to EPA Method 601.

Discussion between Aquaterra (contractor) and Mr. Steven Barnhardt of the DEM indicate that existing boring logs for the area are adequate to assess the aquifer characteristics of the site.

The estimated completion date for well installation, sampling and report preparation is 3/31/92.

Also, Burlington requests a Certificate of Approval for disposal of the ~10 cubic yards of soil contaminated with oil and grease. It was indicated that a TCLP would not be required in lieu of the attached analysis.

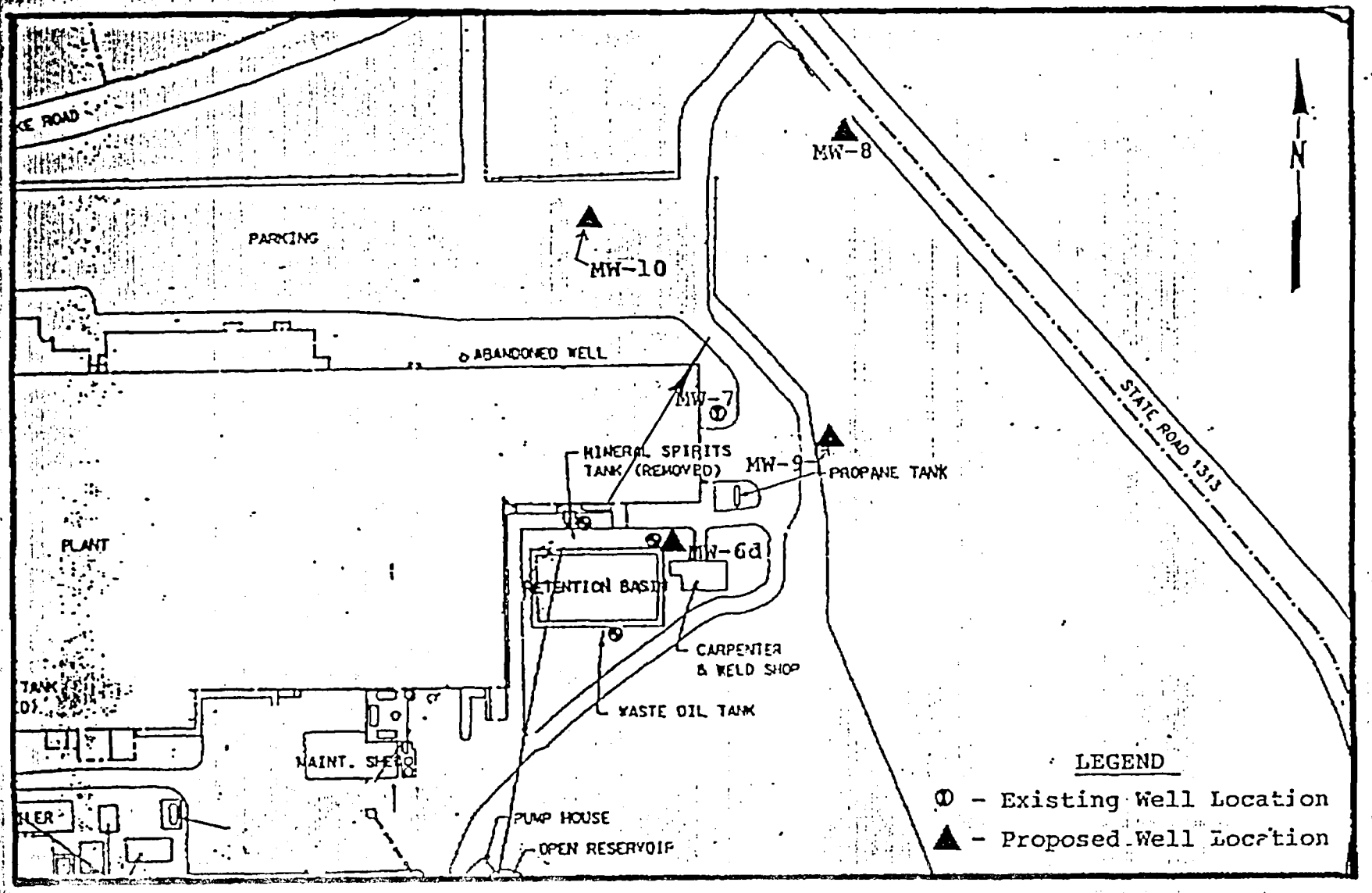
If you have questions or comments concerning this information, please call me at 804-374-8111, extension 3514.

Sincerely,

G. Mike Garlick
Division Environmental Engineer

GMG/dr

cc: T. Fripp - BMEO
M. Cowley - BMEO
F. Sessoms - BMD
A. Allen - Raeford
T. LeJeune - 3330/Engergy



PROJECT:
Burlington Industries, Inc.
Raeford, North Carolina

TITLE:
Proposed Well Location Map

JOB:	DRAWING:	FIGURE:	SCALE:
C467	---	1	1"=200'

AQUATERRA, INC.
RALEIGH, GREENSBORO, CHARLOTTE
NORTH CAROLINA

iea
an environmental testing company
P.O. Box 12846
Research Triangle Park, North Carolina 27709
(919) 677-0090
FAX (919) 677-0427

November 18, 1991

FAX TRANSMITTAL FROM:
AQUATERRA, INC.
P.O. BOX 668107 CHARLOTTE, NC 28266-8107
PHONE: 704-525-8680 FAX # 704-527-2792
TO: Mike Garlick ✓ PAGES
COMPANY Burlington Ind. 7
FAX TO #: 804-374-4327
FROM: S. Burrows JOB # C467
COMMENTS: Raeford resampling

Steve Burrows
Aquaterra, Inc.
4209-B Stuart Andrew Blvd.
Charlotte, NC 28217

Reference IEA Report No.: 794231
Project I.D.: C467

Dear Mr. Burrows,

Transmitted herewith are the results of analyses on three samples submitted to our laboratory.

Please see the enclosed reports for your results.

RECEIVED
NOV 19 1991

Very truly yours,

IEA, Inc.

Linda F. Mitchell
Director, Technical Support Services

State Certification:
Alabama - #40210
Georgia - #816
New Jersey - #67719
FAX
Tennessee - #00296
Virginia - #00179
South Carolina - #99021
North Carolina - #37720
#84

iea

PURGEABLE HALOCARBONS
EPA 601 COMPOUND LIST

IEA Sample Number:	794-231-3	Date Received:	11/01/91
Client Name:	Aquaterra, Inc.	Date Sampled:	10/31/91
Client Project ID:	C467	Date Analyzed:	11/10/91
Sample Identification:	MW 7 (Downgradient)	Analysis By:	Lewis
Matrix:	Water	Dilution Factor:	1

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	3
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	4
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	43
27	1,3-Dichlorobenzene	1.0	2
28	1,2-Dichlorobenzene	1.0	1
29	1,4-Dichlorobenzene	1.0	7

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

iea

PURGEABLE HALOCARBONS
EPA 601 COMPOUND LIST

IEA Sample Number:	794-231-2	Date Received:	11/01/91
Client Name:	Aquaterra, Inc.	Date Sampled:	10/31/91
Client Project ID:	C467	Date Analyzed:	11/10/91
Sample Identification:	MW 6i	Analysis By:	Lewis
Matrix:	Water	Dilution Factor:	1

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	18
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	1
13	1,1,1-Trichloroethane	1.0	3
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	1
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	13
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	6
			17

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

iea

PURGEABLE HALOCARBONS
EPA 601 COMPOUND LIST

IEA Sample Number:	794-231-1	Date Received:	11/01/91
Client Name:	Aquaterra, Inc.	Date Sampled:	10/31/91
Client Project ID:	C467	Date Analyzed:	11/11/91
Sample Identification:	MW 5i	Analysis By:	Averill
Matrix:	Water	Dilution Factor:	1

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	32
9	1,1-Dichloroethane	1.0	21
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	2
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	2
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	2
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	1
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit

iea

PURGEABLE HALOCARBONS
EPA 601 COMPOUND LIST

IEA Sample Number:	794-231	Date Received:	N/A
Client Name:	Aquaterra, Inc.	Date Sampled:	N/A
Client Project ID:	C467	Date Analyzed:	11/11/91
Sample Identification:	QC Blank	Analysis By:	Averill
Matrix:	Water	Dilution Factor:	1

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Sample: 794-231-1

iea

PURGEABLE HALOCARBONS
EPA 601 COMPOUND LIST

IEA Sample Number:	794-231	Date Received:	N/A
Client Name:	Aquaterra, Inc.	Date Sampled:	N/A
Client Project ID:	C467	Date Analyzed:	11/10/91
Sample Identification:	QC Blank	Analysis By:	Lewis
Matrix:	Water	Dilution Factor:	1

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Chloromethane	1.0	BQL
2	Bromomethane	1.0	BQL
3	Vinyl Chloride	1.0	BQL
4	Dichlorodifluoromethane	1.0	BQL
5	Chloroethane	1.0	BQL
6	Methylene chloride	1.0	BQL
7	Trichlorofluoromethane	1.0	BQL
8	1,1-Dichloroethene	1.0	BQL
9	1,1-Dichloroethane	1.0	BQL
10	trans-1,2-Dichloroethene	1.0	BQL
11	Chloroform	1.0	BQL
12	1,2-Dichloroethane	1.0	BQL
13	1,1,1-Trichloroethane	1.0	BQL
14	Carbon tetrachloride	1.0	BQL
15	Bromodichloromethane	1.0	BQL
16	1,2-Dichloropropane	1.0	BQL
17	cis-1,3-Dichloropropene	1.0	BQL
18	Trichloroethene	1.0	BQL
19	trans-1,3-Dichloropropene	1.0	BQL
20	1,1,2-Trichloroethane	1.0	BQL
21	Dibromochloromethane	1.0	BQL
22	2-Chloroethylvinyl ether	1.0	BQL
23	Bromoform	1.0	BQL
24	Tetrachloroethene	1.0	BQL
25	1,1,2,2-Tetrachloroethane	1.0	BQL
26	Chlorobenzene	1.0	BQL
27	1,3-Dichlorobenzene	1.0	BQL
28	1,2-Dichlorobenzene	1.0	BQL
29	1,4-Dichlorobenzene	1.0	BQL

Comments:
Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor.
BQL = Below Quantitation Limit
N/A = Not Applicable
Corresponding Sample: 794-231-2 and 794-231-3

GC/MS PURGEABLES
SW-846 METHOD 8240

IEA Sample Number: 794-179(0)-1
Sample Identification: SS-1 Soil
Date Analyzed: 07/23/91 By: Greene

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	100	BQL
2	Benzene	5	BQL
3	Bromodichloromethane	5	BQL
4	Bromoform	5	BQL
5	Bromomethane	10	BQL
6	2-Butanone	100	BQL
7	Carbon disulfide	5	BQL
8	Carbon tetrachloride	5	BQL
9	Chlorobenzene	5	BQL
10	Dibromochloromethane	5	BQL
11	Chloroethane	10	BQL
12	2-Chloroethylvinyl ether	10	BQL
13	Chloroform	5	BQL
14	Chloromethane	10	BQL
15	1,1-Dichloroethane	5	BQL
16	1,2-Dichloroethane	5	BQL
17	1,1-Dichloroethene	5	BQL
18	1,2-Dichloroethene (total)	5	BQL
19	1,2-Dichloropropane	5	BQL
20	cis-1,3-Dichloropropene	5	BQL
21	trans-1,3-Dichloropropene	5	BQL
22	Ethylbenzene	5	BQL
23	2-Hexanone	50	BQL
24	Methylene chloride	5	BQL
25	4-Methyl-2-pentanone	50	BQL
26	Styrene	5	BQL
27	1,1,2,2-Tetrachloroethane	5	BQL
28	Tetrachloroethene	5	BQL
29	Toluene	5	BQL
30	1,1,1-Trichloroethane	5	BQL
31	1,1,2-Trichloroethane	5	BQL
32	Trichloroethene	5	BQL
33	Vinyl acetate	50	BQL
34	Vinyl chloride	10	BQL
35	Xylenes (total)	5	BQL

Comments:
BQL = Below Quantitation Limit

IEA LABORATORY RESULTS

SOIL

IEA Project #: 794-179(0)
Client Name: Aquaterra, Inc.

Sample #	Client ID	Parameter	Results	Date Analyzed
1	SS-1	Oil & Grease (Gravimetric)	810 mg/kg	07/31/91

IEA

Total Petroleum Hydrocarbon Analysis

IEA Sample No:	794-179(1)-1	Date Sampled:	Ø7-12-91
Client Sample No:	SS-1 SOIL	Date Received:	Ø7-19-91
Client Project No:	C467	Date Extracted:	Ø7-23-91

Extraction (SW 846 - 355Ø) / GC-FID analysis (for #2 fuel oil,kerosene,varsol)
Date Analyzed: Ø7-25-91 Analyzed by: Correa

The sample does not contain a petroleum hydrocarbon blend in the distillation range referenced above. The quantitation limit is 2.Ø mg/kg.

Comment:

Purge and Trap (SW 846 - 5Ø3Ø) / GC-FID analysis (for gasoline only)
Date Analyzed: Ø7-24-91 Analyzed by: Correa

The sample does not contain a petroleum hydrocarbon blend with a distillation range similar to gasoline. The quantitation limit is 2.Ø mg/kg.

Comment:

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

October 14, 1991

State of North Carolina
DEHNR
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, North Carolina 28301-5043

ATTN: M.J. Noland

RE: Groundwater Assessment
Burlington Industries
Raeford, Hoke County
Incident No. 5531

Dear Mr. Noland:

In response to your September 27, 1991 letter and several subsequent phone conversations with Mr. Stephen Barnhardt of the DEHNR, following please find a plan of action for additional assessment with a time schedule for completion of the referenced tasks.

Phase I - Confirmation Sampling and Literature Search:

A. Re-sample monitor wells MW-5, MW-6, and MW-7 to verify the initial sampling results. (These are the newly installed wells.) The wells will be bailed several times and sampled for volatile organic compounds according to EPA Method 601.

B. Perform a geology literature search to review existing data on soil borings from the immediate area. Also, provide information on nearby drinking water supply wells.

C. Ground water flow measurements will be taken to verify previous data.

Phase II - Install a Down-gradient Well and Perform a Soil Boring.

If the impact to ground water is confirmed, Burlington will proceed to Phase II.

A. Install a down-gradient shallow monitoring well to aid in determining the horizontal extent of the ground water contamination. The well will be located down-gradient from MW-7 approximately 25' from the property line and sampled for volatile organic compounds according to EPA Method 601.

B. If the geology literature search in Phase I is inadequate to determine a confining layer, then a soil boring will be made up-gradient to the contamination area. Split spoon samples will be taken during the boring to determine the presence and location of a confining layer.

The schedule for Phase I and Phase II work is as follows:

Phase I - Completion Date -	11/4/91
Phase II - Completion Date -	12/4/91
Report Completion and Submittal -	12/23/91

Burlington requests approval of the described plan of action and time schedule. Also, it is requested that the former Varsol UST area be considered closed since there were no ground water contaminates above the NC Class GA Ground Water Standards (7/12/91 sample on MW-3 submitted on 9/9/91).

If you have questions or comments concerning this information, please call me at 804-374-8111, extension 3514.

Sincerely,

G. Mike Garlick

G. Mike Garlick
Division Environmental Engineer

GMG/dr

cc: T. Fripp - BMEO
M. Cowley - BMEO
A. Allen - BMD
L. Nowell - Raeford

David Duncklee, Aquaterra, Inc., P.O. Box 50328, Raleigh, NC 27650
Stephen Barnhardt, DEHNR, Fayetteville Reg. Office, Fayetteville, NC 28301-5043

Table 4. Ground Water Analytical Results for Monitoring Wells MW-6d, MW-8, MW-9 and MW-10, Burlington Industries, Inc., Raeford, North Carolina.

EPA 601 Compounds	North Carolina Ground Water Standards	1-16-92 MW-6d	2-13-92 MW-6d	1-16-92 MW-8	1-16-92 MW-9	2-13-92 MW-9	1-16-92 MW-10
Purgeable Halocarbons							
1,1-Dichloroethene	7	4.7	7	BQL	0.6	1	BQL
1,1-Dichloroethane	LQL	4.5	7	BQL	2.64	4	BQL
cis-1,2-Dichloroethene	LQL	BQL	BQL	BQL	BQL	2	BQL
Chloroform	0.19	1.42	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	0.3	9.9	13	BQL	BQL	BQL	BQL
1,1,1-Trichloroethane	200	1.4	2	BQL	BQL	BQL	BQL
Trichloroethene	2.8	BQL	BQL	BQL	1.1	2	BQL
Tetrachloroethene	0.7	BQL	1	BQL	2.36	3	BQL
Chlorobenzene	300	BQL	BQL	BQL	22.1	51	BQL
1,2-Dichlorobenzene	LQL	BQL	BQL	BQL	BQL	1	BQL
1,3-Dichlorobenzene	LQL	BQL	BQL	BQL	0.74	2	BQL
1,4-Dichlorobenzene	LQL	BQL	2	BQL	6.15	15	BQL

All units in µg/L
LQL Not allowed in ground water above laboratory quantitation limit (NCAC T15:02L.0202).
BQL Below the Laboratory Quantitation Limit

Analytical Laboratory: Hydrologic, Inc.
Frankfort, Kentucky

Aquaterra Job No. C467

File

Burlington Menswear

RECEIVED
MAY 31 1991
ENV. MANAGEMENT
FAYETTEVILLE REG. OFFICE

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

May 23, 1991

State of North Carolina
DEHNR
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: Mr. Stephen Barnhardt

RE: Additional Groundwater Assessment Requirements
Burlington Industries - Raeford Facility
Raeford, NC
DEHNR No. 5531

Dear Mr. Barnhardt:

Attached, please find a description of the proposed additional assessment on the Raeford facility sites prepared by Aquaterra. Burlington is in agreement with this proposal and will submit the assessment report in September 1991.

If you have any questions or comments, please contact me at 804-374-8111 extension 3514.

Sincerely,

G. Mike Garlick
Div. Environmental Engineer

GMG/dr

Enclosures

cc: T. Fripp - BMEO
B. Archer - Raeford
L. Nowell - Raeford
A. Allen - BMD
F. Sessoms - BMD
T. LeJeune - 3330/Energy

AQUATERRA

Environmental Consultants

May 21, 1991

State of North Carolina
Department of Environment, Health, and Natural Resources
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, North Carolina 28301-5043

Attention: Mr. Stephen Barnhardt

Reference: Additional Groundwater Assessment Requirements
Burlington Industries, Inc. Facility
Raeford, North Carolina
DEHNR Incident Number 5531
Aquaterra Job Number C467

Dear Mr. Barnhardt:

In response to your April 23, 1991 correspondence to Burlington Industries, Inc. (Burlington) and relative to our phone conversation today, please find below a brief description of our proposed work tasks and a time schedule for providing the additional requested assessment information.

Items #1 and #3: In order to sample the deeper water of the surficial aquifer, Burlington will construct an intermediate depth monitoring well in the hydraulically downgradient vicinity of the former Safety Kleen UST location. Currently the well is proposed to be completed to a depth of approximately 35 feet below the ground surface with a 5 foot screened interval. Split spoon samples will be collected during the construction of the well to determine the presence and location of an upper confining layer.

Subsequent to its completion, the well will be developed and sampled with a decontaminated Teflon bailer. The sample will be analyzed for volatile organic compounds according to EPA Method 601. This sample will provide information regarding the vertical extent of contamination, if any is present. As we discussed on the phone today, if deeper contamination is present, then additional assessment activities may be necessary to determine the location and characteristics of an upper confining layer.

Item #2: During the installation and sampling of the intermediate depth well, monitoring wells MW-3 and MW-5 will be developed and sampled for purgeable aromatic compounds according to EPA Method 602, as requested.

Item #4: An intermediate depth well will be installed in the vicinity of MW-6 to determine the vertical extent of ground water contamination, if any, near the adjacent retention basin. A downgradient shallow monitoring well will be

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Raleigh, NC 27650
(919) 859-9987
FAX (919) 859-9930

Charlotte Office:
P O Box 668107
Charlotte, NC 28266-8107
(704) 525-8680
FAX (704) 527-2792

Greensboro Office:
P O Box 16241
Greensboro, NC 27416-0241
(919) 273-5003
FAX (919) 271-8138

constructed to aid in determining the extent of ground water contamination in the vicinity of MW-6. Split spoon samples will be collected during the construction of the wells to determine the presence and location of an upper confining layer. The location of the wells will depend on access at the site. Subsequent to their completion, the wells will be developed and sampled for volatile organic compounds according to EPA Method 601.

Based upon the proposed work tasks, the monitoring well construction and sampling should be completed by mid June, 1991. Analytical results should be received by or around the first week of July. Dependent upon the results, an assessment report should be issued to Burlington by the end of July, 1991. Based upon their review and approval, the report should be issued to DEHNR by or around the end of August 1991.

If you have any questions or comments regarding this information, please call me at 704-525-8680 at your convenience.

Sincerely,

AQUATERRA, INC.

Thomas A. Proctor

Thomas A. Proctor
Project Manager

L193-91C
TAP/tap

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

April 5, 1991

NCDEHNR
Fayetteville Regional Office
Groundwater Section
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: Mr. Stephen A. Barnhardt

Re: Burlington Industries' Raeford Plant
UST Assessment
Response to 2/18/91 Correspondence

Dear Mr. Barnhardt:

Burlington Industries agrees with the attached comments from Aquaterra that the two monitoring wells (MW-3 and MW-5), located at the tank pits, are positioned to detect a release from the former UST systems. Detailed site plans are attached which show the exact locations of MW-3 and MW-5 in reference to each UST pit and adjacent buildings.

If you have any questions or comments, please contact me at 804-374-8111 extension 3514.

Sincerely,

G. Mike Garlick
Division Environmental Engineer

GMG/dr

Attachments

cc:
T. Fripp - BMEO
M. Cowley - BMEO
A. Allen - BMD
L. Nowell - Raeford
T. LeJeune - 3330/Energy

AQUATERRA

Environmental Consultants

March 22, 1991

Burlington Menswear
Executive Offices
Post Office Box 788
Clarksville, Virginia 23927

Attention: Mr. Michael Garlick
Division Engineer

Reference: Raeford Facility Assessment Report Review
Raeford, North Carolina
Aquaterra Job Number C467

Dear Mr. Garlick:

As we discussed, I have reviewed the February 18, 1991 correspondence from the North Carolina Department of Environment, Health, and Natural Resources (DEHNR) regarding the assessment activities conducted to date at the Raeford facility. Their review of the Phase I ground water assessment activities report indicates that "groundwater potentially impacted by a release from the underground storage tanks would not be detected by the monitoring wells currently installed."

As we discussed, the shallow monitoring wells constructed at the former UST pits were located immediately adjacent to excavation pit. Although subsequent determination of the shallow ground water flow direction indicates that the ground water is migrating toward the building in a northerly direction, it is our opinion that the two monitoring wells (MW-3 and MW-5) located at the tank pits, are positioned to monitor a release from the UST systems.

The depth to ground water at the site is quite shallow (6.5 feet at MW-3 and 9.0 feet at MW-5). Assuming the USTs were buried approximately 2 to 3 feet below the ground surface, the UST pit bottoms would be approximately 7 feet below the ground surface. A review of the UST closure reports indicates that the UST system adjacent to MW-3 was placed on a concrete pad and that both UST excavations were extended vertically to the shallow ground water. Releases from the UST systems would impact the soils in and around the UST excavation first and then migrate to shallow ground water. Based upon this, monitoring wells MW-3 and MW-5 appear to be positioned to detect releases from their respective systems.

If, as the DEHNR correspondence requests, an additional well is installed hydraulically downgradient of each UST system, Aquaterra would not recommend the well be installed immediately adjacent to the UST excavation. Having two wells

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(704) 525-8680
FAX (704) 527-2792

Greensboro Office:
P O Box 16241
Greensboro, NC 27416-0241
(919) 273-5003
FAX (919) 271-8138

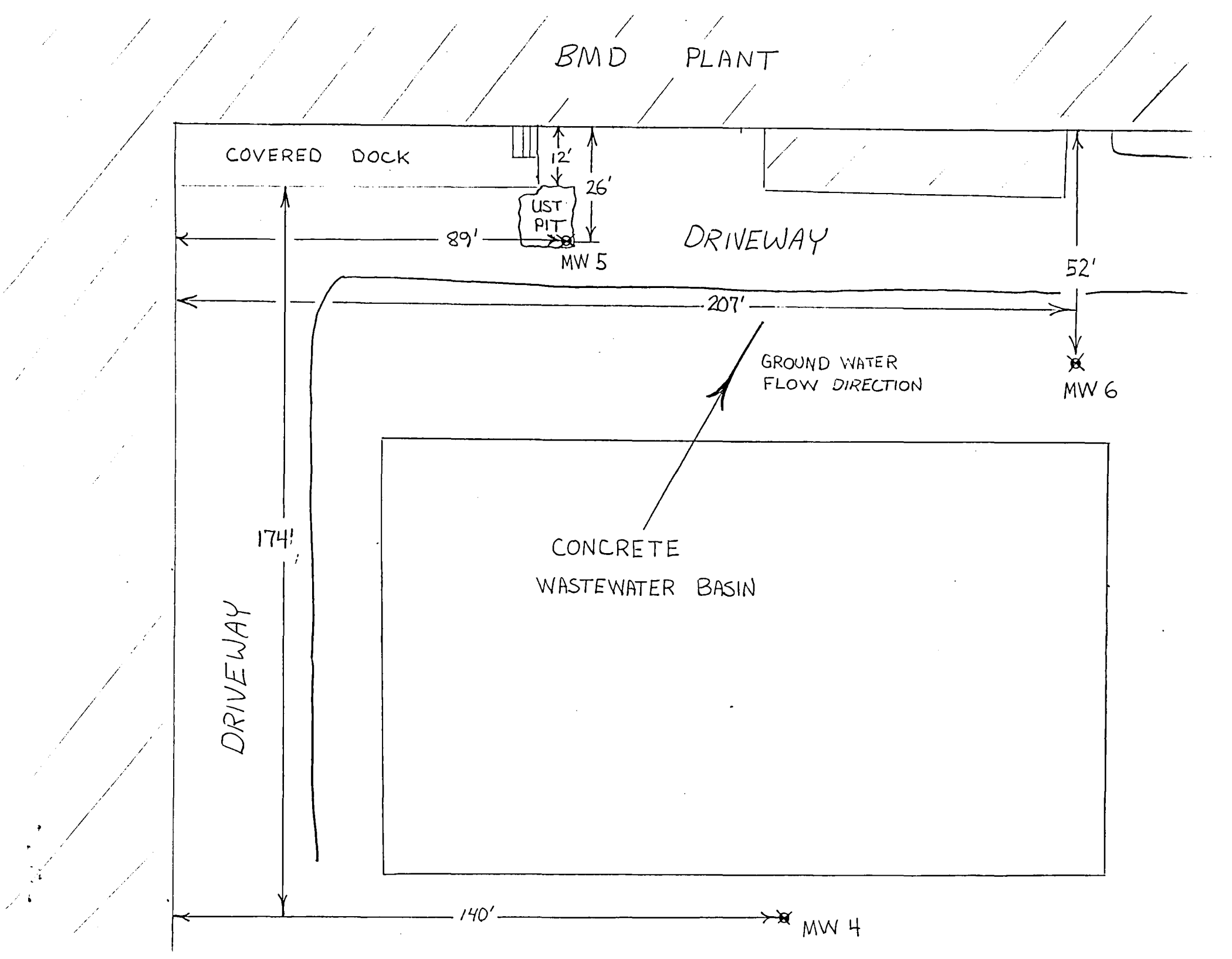
at each UST site only several feet apart would not aid in the assessment of the shallow ground water quality. Aquaterra would recommend that the wells be placed 30 to 40 feet downgradient, or as close to the building as possible, of the former UST sites and, due to the shallow ground water at the site, that they be installed with a decontaminated hand auger. This approach would allow the placement of the wells closer to the building and would also minimize the cost of the installation.

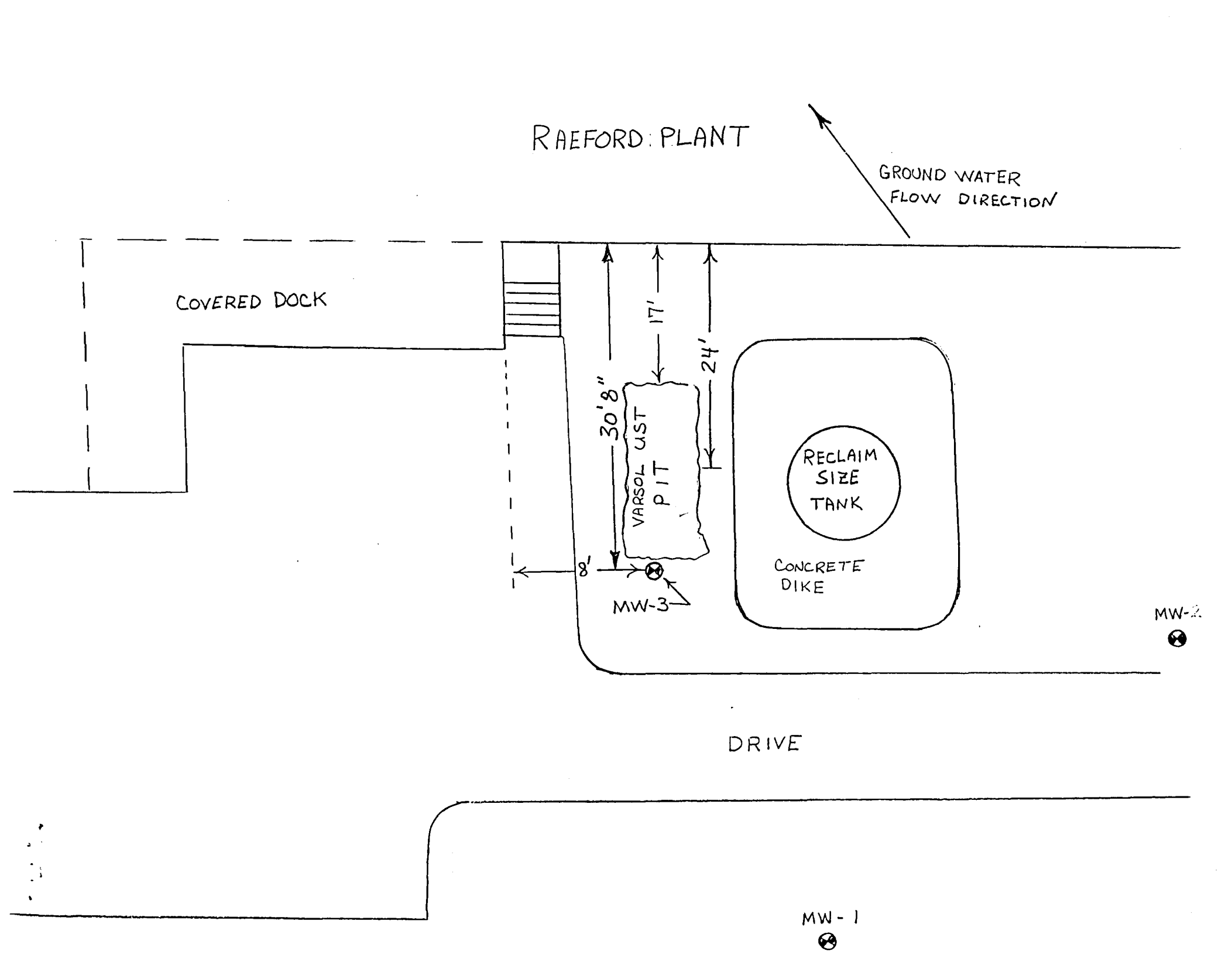
We would be glad to discuss these issues in more detail at your convenience. If you have any questions or comments, please don't hesitate to contact me at 704-525-8680.

Sincerely,
AQUATERRA, INC.

Thomas A. Proctor
Project Manager

TAP/tap
L173-91C


BMD PLANT
COVERED DOCK
12'
26'
UST PIT
89'
MW 5
DRIVEWAY
52'
207'
GROUND WATER FLOW DIRECTION
MW 6
174'
CONCRETE WASTEWATER BASIN
DRIVEWAY
140'
MW 4


RAEFORD PLANT
GROUND WATER FLOW DIRECTION
COVERED DOCK
17'
24'
30'8"
VARSOL UST PIT
RECLAIM SIZE TANK
CONCRETE DIKE
8'
MW-3
MW-2
DRIVE
MW-1

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

February 6, 1991

NCDEHNR
Fayetteville Regional Office
Groundwater Section
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: Mr. Stephen A. Barnhardt

RE: Burlington Industries' Raeford Plant
UST Site Phase I Ground Water Assessment
and Progress Report.

Dear Mr. Barnhardt:

Enclosed, please find the Phase I ground water assessment conducted by Aquaterra, Inc. for the former UST sites at Burlington's Raeford facility.

Burlington Industries is in agreement with the recommendations made by Aquaterra for additional sampling of monitor wells MW-3 and MW-5.

Also, Aquaterra inadvertently sampled the upgradient monitor wells MW-1, MW-2, MW-4 and MW-6. This sampling was not part of the 8/2/90 State approved plan of action; however, these results will be mailed under separate cover in approximately one week.

If you have questions or comments, please contact me at 804-374-8111, extension 3514.

Sincerely,

G. Mike Garlick
Division Environmental Engineer

GMG/dr

cc: T. Fripp - BMEO
M. Cowley - BMEO
T. LeJeune - 3330/Energy
Sessoms/Allen - BMD
Archer/Nowell - Raeford

F16

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

January 9, 1991

N.C. DEHNR
Division of Environmental Mgmt.
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: M.J. Noland/S.A. Barnhardt

RE: Burlington Industries' Raeford Plant
UST Site Progress Report

Gentlemen:

Ground water monitor well test results have been received showing no apparent ground water contamination from the USTs.

A complete report with results will follow in approximately three weeks.

If you have questions or comments, please contact me at 804-374-8111, extension 3514.

Sincerely,

G. Mike Garlick
Division Environmental Engr.

GMG/dr

cc:
T. Fripp - BMEO
B. Archer - Raeford
L. Nowell - Raeford
F. Sessoms - BMD
A. Allen - BMD

File

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

December 6, 1990

N.C. DEHNR
Division of Environmental Mgmt.
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: M.J. Noland/S.A. Barnhardt

RE: Burlington Industries' Raeford Plant
UST Site Progress Report

Gentlemen:

Installation of the shallow ground water monitor wells at the two UST sites was completed on 11/8/90. Aquaterra sampled the wells located directly over the pits and lab results are expected by 12/7/90. A complete report will follow.

If you have questions or comments, please contact me at 804-374-8111 extension 3514.

Sincerely

GMG/dr

CC: T. Fripp - BMEO
B. Archer - Raeford
L. Nowell - Raeford
F. Sessoms - BMD
R. Adams - BMD

F26

Burlington Menswear

RECEIVED
NOV 9 1990
ENV. MANAGEMENT
FAYETTEVILLE REG. OFFICE

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

November 5, 1990

NC Dept. of Environment, Health & Natural Resources
Division of Environmental Mgmt.
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

ATTN: M.J. Noland/S.A. Barnhardt

RE: Burlington Industries Raeford Plant
UST Site Progress Report

Gentlemen:

Approval was received on 10/18/90 to proceed with the proposed plan of action for the two UST sites at Burlington's Raeford complex. Aquaterra will begin the well installation on 11/7/90. Analytical results from the well samples should be complete by 12/4/90.

Also, Burlington requests approval to spread the 84 yds^3 of contaminated soil removed from the UST pits on site according to your recommendations. Currently, the soil is stockpiled and covered with plastic.

If you have questions or comments, please contact me at 804-374-8111 extension 3514.

Sincerely,

Mike Garlick

G. Mike Garlick
Div. Environmental Engineer

GMG/dr

cc: T. Fripp - BMEO
B. Archer- Raeford
L. Nowell - Raeford
F. Sessoms - BMD
A. Allen - BMD

CRAFTED WITH PRIDE IN U.S.A.

LOOK AND SEE IF IT IS OK

AQUATERRA

Aquaterra, Inc. • PO Box 668107 • Charlotte, NC 28266-8107 • 704-525-8680 • FAX 704-527-2792

August 2, 1990

State of North Carolina
Department of Environment, Health, and Natural Resources
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, North Carolina 28301-5043

Attention: Mr. Stephen Barnhardt

Reference: Underground Storage Tank Release Assessment Proposal
Burlington Industries Facility
Raeford, North Carolina
Aquaterra Job Number 467C

Dear Mr. Barnhardt:

1.0 Background

Aquaterra Inc. (Aquaterra) has been retained by Burlington Industries, Inc. (Burlington) to perform a limited shallow ground water assessment at the above referenced facility. These assessment activities are in response to the removal of several underground storage tanks (USTs) at the facility. The UST assessment activities, conducted by Aquaterra, indicated that the soils in the vicinity of the UST systems had been impacted by released product. On June 6, 1990, a correspondence from your office requested that Burlington perform a limited shallow ground water assessment at two of the UST sites in order to determine the potential for shallow ground water contamination. The remainder of this letter includes a brief description of our proposed field activities and our estimated schedule for performing the work tasks.

2.0 Field Activities

Based upon the June 6, 1990 correspondence from DEM, it is currently proposed that three shallow ground water monitoring wells will be installed topographically downgradient of each of two UST sites. The wells will be permitted and constructed according to the applicable Well Construction Standards as promulgated by the State of North Carolina. A completed Application for Permit to Construct Monitor Wells is attached to this document for your review and approval. The proposed locations of the six monitoring wells are shown on the attached map. The map, prepared by Burlington, also shows the known industrial and domestic water supply wells in the vicinity of the site. Also attached is a well construction schematic showing a typical shallow ground water monitoring well, similar to the type proposed for the site.

Each of the wells will be screened such that the screened interval intersects the shallow ground water interval. Subsequent to completion of the wells, they will be properly developed with laboratory decontaminated Teflon bailers. Subsequent to development, the well at each location closest to the former UST site will be sampled for laboratory analysis. The samples will be handled according to applicable EPA sampling protocols and will be transferred to the analytical laboratory utilizing chain-of-custody procedures. Based upon the results of the initial UST sampling, it may be necessary to resample all of the wells at each of the sites.

Based upon our understanding of the contents of the respective UST systems, the wells in the vicinity of both pits will be analyzed for semi-volatile organic compounds according to EPA Method 625, with the addition of a library search. Based upon our telephone conversation in early July, the wells in the vicinity of the mineral spirits UST will also be sampled and analyzed for purgeable halocarbons according to EPA Method 601.

During the site visit, the Aquaterra geologist will also survey the well heads in order to determine their location and elevation relative to a temporary benchmark at the site. Subsequent to the survey, the geologist will collect static water levels from all of the wells, and will also perform permeability tests on four of the six wells in order to determine the approximate ground water flow velocity across the two UST sites. This information, along with the analytical results and our conclusions and recommendations, will be summarized into a report for submittal to DEM. In addition to the assessment activities described herein, the report will also address the necessary Minimum Information Requirements for Review and Evaluation of Remedial Action Plans and Supporting Site Characterizations, as attached to your correspondence to Burlington.

3.0 Proposed Schedule of Implementation

Based upon the scope of these assessment activities, we propose to begin the well installation phase within 10 business days of receiving the approval of DEHNR and Burlington. We propose that the work tasks will take approximately 5 days to complete and that the laboratory analytical results should be received within approximately 21 days of the ground water sampling event.

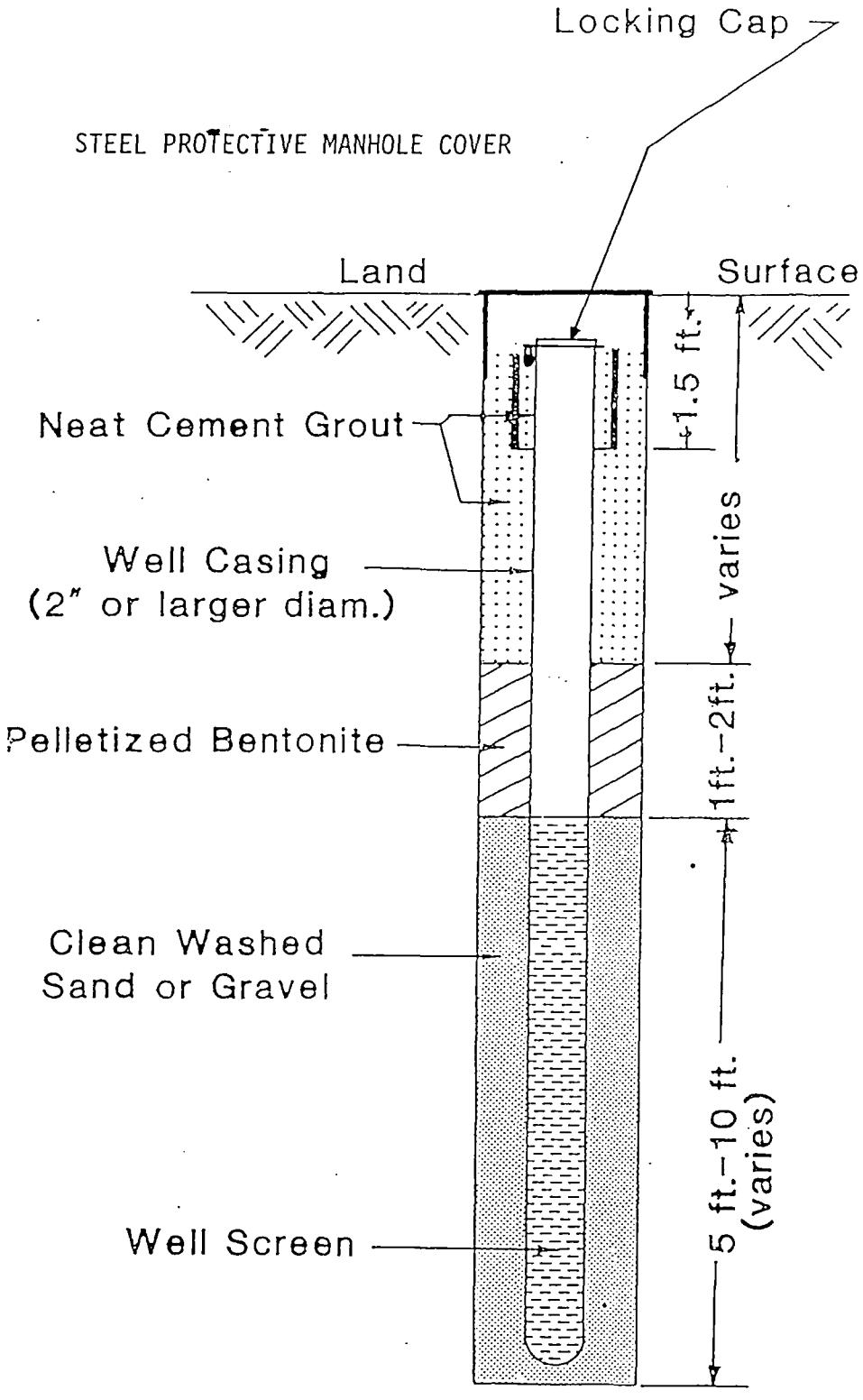
If you have any questions or comments, please call me at 704-525-8680.

Sincerely,
AQUATERRA, INC.

Thomas A. Proctor
Project Manager

CC: Mr. Michael Garlick, Burlington Industries, Inc

TAP/rap
L121-90C



NOTE:

1. Borehole to be six inches larger than outside diameter casing.
2. Casing and screen to be centered in borehole.
3. Top of well screen should no be above mean high seasone water level.
4. Casing and screen material t be compatible with type of contaminant being monitored.
5. Well head to be labeled with highly visible warning saying "Well is for monitoring and nc considered safe for drinking."
6. Well to be afforded reasonab protection against damage after construction.

GWS 10/84

Recommended Construction Details For A Contaminant Monitor Well

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

APPLICATION FOR PERMIT TO CONSTRUCT MONITOR/RECOVERY WELL(S)

To: NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION July 31, 1990

Gentlemen:

In accordance with the provisions of Article 7, Chapter 87, General Statutes of North Carolina, and regulations pursuant thereto, application is hereby made by Burlington Industries, Inc. (name of well owner) for a permit to construct a monitor/recovery well(s) as described below and in the accompanying data submitted as a part of this application.

(a) Name of property owner: Burlington Industries, Inc.

(b) Location of property: Turnpike Rd. and SR 1311 (Road, Industry, Community, etc.) Raeford Town Hoke County

(c) Type of facility or site being monitored: Textile Manufacturer

(d) Types of contamination being monitored or recovered: Petroleum Hydrocarbons

(e) Existing monitor well numbers: None

(f) Existing monitor wells showing contamination (well no.): N/A

(g) Estimated water-table depth: 10 - 15' b.g.s. feet

(h) Estimated date of construction: Begin 9/1/90 Complete 9/6/90

(i) Drilling constractor: Carolina Drilling, Wilmington, NC

(j) Location of well: Provide a detailed map showing the location of the proposed well(s), and of any wells in an existing monitoring system (if applicable), in relation to the pollution source(s) being monitored and to at least two (2) nearby permanent reference points such as roads, intersections, and streams. Identify roads with State Highway road identification numbers. (Show all existing water supply wells within a radius of 1,000 feet of the proposed well.)

(k) Well construction diagram: Provide a diagram showing proposed construction specifications, including diameter, estimated depth, screens, sand pack, grout, type of materials, etc.

The Applicant hereby agrees the proposed well will be constructed in accordance with approved specifications and conditions of the Well Construction Permit. As regulated under the Well Construction Standards (Title 15 - North Carolina Administrative Code, Subchapter 2C)

Signature of Well Owner or Agent

Project Manager
Title (if applicable)

Burlington Ind.,Inc. Menswear Div.
PO Box 788, Clarksville, VA 23927
(Mailing Address of Well Owner-Required)

Aquaterra, Inc.
PO Box 668107, Charlotte, NC 28266-8107
(Mailing Address of Agent-if other than above)

FOR OFFICE USE ONLY

PERMIT NO. _____ issued _____ 19__

GW-22B

NCDOS
Response
Acknowledgment
RRS

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

June 29, 1990

Mr. Stephen Barnhardt
Division of Environmental Management
Fayetteville Regional Office
Wachovia Building, Suite 714
Fayetteville, NC 28301-5043

RECEIVED
JUL 2 1990
ENV. MANAGEMENT
FAYETTEVILLE REG. OFFICE

Subject: Underground Storage Tank Release Assessment
Burlington Industries
Raeford, Hoke County, NC
Incident # 5531

Dear Mr. Barnhardt,

In response to the June 6, 1990 letter requesting Burlington Industries to perform an assessment of the potential impact to the ground water beneath the former 1000 gallon varsol and 1000 gallon mineral spirits UST sites, following is an initial outline of our plan of action. Also, enclosed please find a plant site map with UST sites indicated. As discussed on 6/29/90, the site map will be updated to include all environmentally sensitive features within 1500' of the former UST sites.

1. Update site map to include all environmentally sensitive features within 1500' of the UST sites - 8/3/90

2. Determine the direction of ground water flow.

   a. Submit plan of action - 8/3/90.

   b. Implement plan of action within 45 days of approval.

3. Determine if the ground water beneath the former UST sites has been impacted.

   a. Submit a plan and application to construct monitor wells 8/3/90.

   b. Construct monitor wells within 45 days of approval.

Subject: Underground Storage Tank Release Assessment
Burlington Industries
Raeford, Hoke County, NC
Incident # 5531

4. After completion of items 1, 2 and 3, determine the need for additional assessment or remediation.

If you have questions or comments please call me at 804-374-8111, ext. 3514.

Sincerely,

G. Mike Garlick
Division Staff Engineer

GMG/dr

cc: T. Fripp - BMEO
M. Cowley - BMEO
J. Hoyle - 3330/Energy
B. Archer - Raeford
L. Nowell - Raeford
A. Allen - BMD
F. Sessoms - BMEO

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

May 2, 1990

NCDEHNR
Fayetteville Regional Office
Div. Environmental Management
Suite 714, Wachovia Bank Bld.
Fayetteville, NC 28301

ATTN: Mr. Steve Barnhardt

RE: UST Closure
Burlington Industries
Raeford and BMD Plants

Dear Mr. Barnhardt:

Enclosed, please find the MSD sheets for Varsol and Safety-Kleen (Mineral Spirits) as requested. Also, enclosed is the addition lab information on the waste oil tank site (Tank Pit 3).

As recommended by Aquaterra, Burlington requests that the waste oil tank pit be considered for clean closure.

If you have any comments or questions, please contact me at 804-374-8111, extension 3514.

Sincerely,

G M Garlick

G. Mike Garlick
Div. Environmental Engineer

GMG/dr

Attachments

cc: T. Fripp - BMEO
J. Hoyle - 3330/Engr.
L. Nowell - Raeford

STATE

AQUATERRA
Aquaterra, Inc. • P.O. Box 50328 • Raleigh, NC 27650 • 919-839-0199

April 16, 1990

Four Seasons Industrial Services, Inc.
Post Office Box 16590
Greensboro, North Carolina 27416

Attention: Mr. Jeff Knight

Reference: Underground Storage Tank Closure Assessment Update
Burlington Industries
Raeford, North Carolina
Aquaterra Job No. 42T

Dear Mr. Knight,

Aquaterra, Inc. (Aquaterra) has conducted an underground storage tank (UST) closure assessment at the above referenced site, as summarized in the April 4, 1990 report "Underground Storage Tank Closure Assessment." The assessment was conducted in an effort to satisfy the UST closure assessment requirements set forth in 40 CFR Part 280 Subpart G.

As summarized in Table 1 of the April 4, 1990 report, the two pit bottom soil samples from the waste oil pit both exhibited TPH levels below the laboratory quantitation limit of 2 mg/Kg. The additional laboratory analysis required by the North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management (DEM), which includes the eight RCRA metals in extracted leachate (EP TOX metals), Oil and Grease and Total Organic Halides (TOX), have been completed. The two pit bottom soil samples (3PB1 and 3PB2) were below laboratory quantitation limits for EP TOX Metals and Oil & Grease. Sample 3PB1 exhibited 0.21 mg/Kg and sample 3PB2 exhibited 0.20 mg/Kg of TOX. These results are below the 1.0 mg/Kg action level currently established by the North Carolina Department of Environment, Health and Natural Resources, Division of Solid Waste Management. Soil results for EP TOX Metals, Oil & Grease, and TOX are documented in the attached laboratory analysis report.

Based upon the laboratory results, Aquaterra recommends that the waste oil tank pit be considered for clean closure.

The results of the soil analysis presented in this letter should be forwarded to the Department of Environment, Health & Natural Resources, Division of Environmental Management, in Fayetteville, North Carolina for their review.

If you have any questions, please do not hesitate to contact us.

Sincerely,

AQUATERRA, INC.

Crystal E. Killen
Staff Geologist

C. Earl Jones

C.Earl Jones
Project Manager

CEK/CEJ/dm
GL29-90

Industrial & Environmental Analysts, Inc.
P.O. Box 12848
Research Triangle Park, North Carolina 27709
(919) 677-0090
FAX (919) 677-0427

April 10, 1990

APR 1 1 1990

Earl Jones
Aquaterra, Inc.
309 Concord Street, Suite 204D
Greensboro, NC 27406

Reference IEA Report No.: 835124(1)
Project ID: 42T

Dear Mr. Jones,

Transmitted herewith are the results of analyses on two samples submitted to our laboratory.

Please see the enclosed reports for your results.

Very truly yours,

INDUSTRIAL & ENVIRONMENTAL ANALYSTS, INC.

Linda F. Mitchell
Director, Technical Support Services

State Certification:

Alabama - #40210	New Jersey - #67719	South Carolina - #99021
Georgia - #816	Tennessee - #00296	North Carolina - #37720
Kansas - #E-158	Virginia - #00179	#84

IEA LABORATORY RESULTS

IEA Project #: 835-124(1)
Client Name: Aquaterra, Inc.

Sample #	Client ID	Parameter	Results		Date Analyzed
1	3PB1	Arsenic - EP TOX	<0.50	mg/L	04/04/90
2	3PB2	Arsenic - EP TOX	<0.50	mg/L	04/04/90
1	3PB1	Barium - EP TOX	<10	mg/L	04/04/90
2	3PB2	Barium - EP TOX	<10	mg/L	04/04/90
1	3PB1	Cadmium - EP TOX	<0.10	mg/L	04/04/90
2	3PB2	Cadmium - EP TOX	<0.10	mg/L	04/04/90
1	3PB1	Chromium -EP TOX	<0.50	mg/L	04/04/90
2	3PB2	Chromium -EP TOX	<0.50	mg/L	04/04/90
1	3PB1	Mercury - EP TOX	<0.0005	mg/L	04/02/90
2	3PB2	Mercury - EP TOX	<0.0005	mg/L	04/02/90
1	3PB1	Lead - EP TOX	<0.50	mg/L	04/04/90
2	3PB2	Lead - EP TOX	<0.50	mg/L	04/04/90
1	3PB1	Selenium - EP TOX	<0.10	mg/L	03/31/90
2	3PB2	Selenium - EP TOX	<0.10	mg/L	03/31/90
1	3PB1	Silver - EP TOX	<0.50	mg/L	04/04/90
2	3PB2	Silver - EP TOX	<0.50	mg/L	04/04/90

IEA LABORATORY RESULTS

IEA Project #: 835-124(0)
Client Name: Aquaterra, Inc.

Sample #	Client ID	Parameter	Results		Date Analyzed
1	3PB1	Oil & Grease	<300	mg/kg	03/20/90
2	3PB2	Oil & Grease	<300	mg/kg	03/20/90
1	3PB1	Total Organic Halide	0.21	mg/kg	03/20/90
2	3PB2	Total Organic Halide	0.20	mg/kg	03/20/90

6030

AQUATERRA, INC.

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
427	BI-Raeford

SAMPLERS: (Signature) Crystal E. Killen

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH by GC	Oil & Grease	TOX			REMARKS OVA (ppm)
3PB1	3/13/90	9:30		X	@7'	1	X	X	X			60
3PB2	↓	↓		X	@7'	1	X	X	X			10.0
5PB1	↓	↓		X	@9' east end	1	X					1000+
5PB2	↓	↓		X	@9' west end	1	X					1,000+
4PB1	↓	↓		X	@4' east "	1	X					6.0
4PB2	↓	↓		X	@4' west "	1	X					8-10.0
6PB1	↓	↓		X	@9.5' east "	1	X					0.6
6PB2	↓	↓		X	@9.5' west "	1	X					30-50.
		4:30										

IEA#835-124 & -124(D)

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Crystal E. Killen	3/14/90 12:10	Beth Womer			
Beth Womer	3/14/90 12:10	[illegible]			

Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks
		James Hays	3/14 12N	PO # G1110 lab: IEA client: Earl Jones

DISTRIBUTION: Original and Pink copies accompany sample shipment to laboratory; Pink copy retained by laboratory; Yellow copy retained by samplers.

Burlington Menswear

A division of Burlington Industries

Executives Offices
P.O. Box 788
Clarksville, Va. 23927
(804) 374-8111

April 10,1990

NCDEHNR
Fayetteville Regional Office
Div. Environmental Management
Suite 714, Wachovia Bank Bld.
Fayetteville, NC 28301

ATTN: Mr. Steve Barnhardt

Re: Underground Storage Tank Closure Assessment
Burlington Industries
Raeford and BMD Plants
Raeford, NC

Dear Mr. Barnhardt:

Enclosed, please find the UST Closure Assessments on the Raeford and BMD tanks prepared by Aquaterra. Note that additional results are forthcoming on Tank Pit 3.

As recommended by Aquaterra, Burlington requests that Tank Pits 1, 4, and 6 be considered for clean closure. Additional assessment will be performed on Tank Pits 2 and 5 as required.

If you have questions or comments regarding this matter, please call me at 804-374-8111 extension 3514.

Sincerely,

G. Mike Garlick
Div. Environmental Engineer

GMG/dr

Enclosures

cc: T. Fripp - BMEO
M. Cowley - BMEO
J. Hoyle - 3330/Engr.
Archer/Nowell - Raeford
Sessoms/Allen - BMD

FOUR SEASONS
INDUSTRIAL SERVICES, INC.

P.O. Box 16590 · 207 Robbins St. · Greensboro, NC 27416-0590 · 919-273-2718
Fax Number 919-274-5798

April 5, 1990

Mr. Mike Garlick
Burlington Industries, Inc.
P.O. Box 1410
Clarksville, VA 23927

Reference: **UST Closure**
Burlington Industries - Raeford Plants
Raeford, North Carolina

Dear Mr. Garlick:

Four Seasons Industrial Services, Inc. is pleased to provide you with this closure summary of the underground storage tank closure project for the above referenced facilities.

On March 12 and March 13, 1990 Four Seasons mobilized a crew to the above referenced facilities and removed six underground storage tanks. Storage tank closure operations were conducted in accordance with the U.S. EPA's Underground Storeage Tank Rules (40 CFR 280 and 40 CFR 281). Specifically, the tank removal met the requirements for closure as defined in 40 CFR 280.71. Additionally, tank closure met the guidelines for closure as specified by the North Carolina Department of Environment, Health, and Natural Resources (NCDEHNR).

Upon removal of the underground storage tanks a closure assessment was performed in accordance with 40 CFR 280.72. The assessment portion of this closure operation is included in Aquaterra's Closure Assessment Reports. There are three copies included; one for your records, one for the NCDEHNR, and one for Mr. Mike Cowley. These records meet all the requirements for closure documentation as specified in 40 CFR 280.74.

Mr. Garlick, if you have any questions or require further information don't hesitate to call.

Sincerely,

Jeff Knight
UST Program Manager